

a projecting second flange the length of which is greater than that of the first flange, such that the joining of two like panel pieces results in an elongate space which demarcates one piece from another.

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Cont. 18. (Amended) A panel assembly comprised of a plurality of like panel pieces joined to one another in matching engagement and secured to a support structure, each panel piece comprising

a front side and a rear side;

two opposing edge faces, one edge face being formed with a beveled recess which extends from [one] said front side to said rear side of the panel piece [to the other], said recess being defined by a projecting first flange whose outer wall is coextensive with the rear side of said panel piece;

a second edge face of said two opposing edge faces, also with a beveled recess which extends from said front side to said rear side and which is matching of the beveled recess formed in the first edge face, said recess being defined by a projecting second flange the length of which is greater than that of the first flange, such that the joining of two like panel pieces results in an elongate space which demarcates one piece from another.

REMARKS

Reconsideration of rejected claims 1-25 is respectfully requested.

In the Office action dated April 26, 2000 (application paper No. 3), the specification was objected to and the claims were rejected under 35 USC §§ 112, second paragraph, 102(b), and 103(a). Claims 1-16 and 22-25 were also provisionally rejected by the Examiner under the judicially-created doctrine of double patenting over copending Application No. 09/235620. The Examiner's various objections and rejections will be discussed below in the order appearing in the Office action.

PRIORITY

The Examiner first noted that the present application claims subject matter from a prior copending application. As instructed by the Examiner, the

specification has been noted to include a reference to copending Application No. 09/235,620 as the first sentence of the specification, since applicant intends to rely on the earlier filing date of this application.

35 USC § 112, second paragraph Rejection – Claims 12-16

The Examiner first rejected claims 12-16 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the present invention. In particular, the Examiner refers to the phrase "the depth" of the groove as used in claims 12 and 13 as being "indefinite", since the depth could be measured from either the rear leg or the front leg, resulting in different lengths. In response, applicant has amended claims 12 and 13 to define the "depth" of the groove in relation to the *rear leg* of the edge face. It is asserted that this amendment is sufficient to overcome the Examiner's 35 USC 112, second paragraph rejection and the applicant respectfully requests the Examiner to reconsider this rejection and find claims 12-16 to be in condition for allowance.

DOUBLE PATENTING

Claims 1-16 and 22-25 were provisionally rejected by the Examiner under the judicially-created doctrine of double patenting over copending Application No. 09/235,620. Applicant is including with this response a **Terminal Disclaimer** to obviate the double patenting rejection such that no claims which would issue from this application will extend in term beyond those that issue in the above-mentioned copending application.

35 USC § 102(b) Rejection – Claims 1-3, 8-14

The Examiner next rejected claims 1-3 and 8-14 under 35 USC 102(b) as being anticipated by US Patent 2,898,640 (Dial). In the rejection, the Examiner cites Dial as disclosing "a panel assembly having panel pieces 22 with front and rear sides, pairs of opposing side and edge faces, one edge being formed as an elongate projection 26, a second edge face formed as an elongate recess, and in Figure 3 a space can be seen between the end of the projection and the recess which indicates that the recess is of greater depth than the projection".

In response to this rejection, applicant has amended claims 1, 2, 12 and 13 to define a panel piece structure configured to include "an open space" between the recess (groove) and projection (tongue) of the interlocking panels. As discussed in the specification, by maintaining a gap between these two pieces, any cantilever force is transferred into shear force along the length of the joining surfaces (e.g., flange 36 and shoulder 38, as shown in FIG. 3). In contrast, the Dial reference cited by the Examiner does not include "an open space" between the mated ceiling panels. Instead, a significant aspect of Dial is the inclusion of a v-shaped reinforcing strip 30 disposed within each space between the joined pieces. Thus, a cantilever force will still exist in this arrangement as the force is transferred from tenon 26 through strip 30 to the bottom surface of mortise 24. In contrast, the arrangement of the present invention *intentionally* leaves a gap between the end termination of the projection 20 and surface 32 of groove 22. As stated in the specification at page 5, beginning at line 16, "[t]he virtue of this invention resides in the elimination of that cantilever force effect, which is associated with known panel systems. This cantilever effect results when the tongue end of one panel comes into contact with the base of the groove in an adjoining panel. The present invention eliminates this cantilever effect by transferring the exerted force onto the rear leg and shoulder of the adjoining panel pieces. The result is a shear force which distributes itself evenly onto the abutting portions of the joined end panels and, also, onto the fastening means employed".

It is asserted that Dial's inclusion of v-shaped reinforcing strip 30 will allow the cantilever force to continue to exist and, therefore, this reference cannot be found to anticipate the subject matter of the present invention as defined by claims 1-3 and 8-14. Applicant thus respectfully requests the Examiner to reconsider this rejection and find these claims to be in condition for allowance.

35 USC § 102(b) Rejection – Claims 18 and 19

Claims 18 and 19 were next rejected by the Examiner under 35 USC 102(b) as being anticipated by US Patent 3,200,553 (Frashour et al.). The Examiner particularly cited Frashour et al. as teaching "a panel assembly with a plurality of panel pieces joined together in matching engagement and secured to

a support structure ... each panel piece has a front and rear side, two opposing edge faces, one edge face with a beveled recess 56 that extends from one side of the panel piece to another, the recess is defined by a projecting first flange whose outer wall is coextensive with the rear side ... a second edge face that also has a beveled recess that matches the first edge face, and when joined together there exists an elongate space that demarcates one piece from another”.

In response, applicant asserts that the Frashour et al. arrangement can be distinguished in that both the projection 38 and space 52 are formed to be maintained in the interior of the floor boards when joined. In contrast, the arrangement defined by claims 18 and 19 includes a beveled edge that is formed to extend from “said-front face to said rear face”. The beveled cavity is so formed as well. The beveled openings thus extend through the entire width of the panel, where this is a significantly different arrangement from that illustrated and disclosed by Frashour et al. Applicant thus asserts that Frashour et al. cannot be found to anticipate claims 18,19 and respectfully request the Examiner to reconsider this rejection.

35 USC § 103(a) Rejection – Claims 4-7, 15, 16, 22-25

The above-cited claims were rejected by the Examiner under 35 USC 103(a) as rendered obvious by Dial when considered with well-known teachings in the art. In response, applicant asserts that the Dial arrangement, by virtue of the inclusion of v-strip 30, teaches away from the present invention. There is no teaching of leaving an open space between the projection/tongue and recess/groove, as is required in the base claims of the present invention, from which the above-cited claims depend. Thus, applicant asserts that the arrangement of Dial still exhibits the cantilever problem solved by the arrangement of the present invention and, therefore, cannot be found to render obvious the teaching of the present invention. Applicant thus respectfully requests the Examiner to reconsider this rejection and find the above-cited claims to be in condition for allowance.

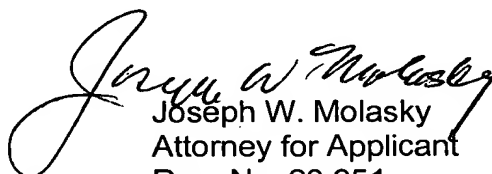
35 USC § 103(a) Rejection – Claims 17 and 20 – 21

Lastly, the Examiner rejected claims 17 and 20 – 21 as rendered obvious under 35 USC 103(a) by Frashour et al. when considered with the well-known state of the art. In response, applicant asserts that Frashour et al. does not disclose or suggest any arrangement where the beveled end faces extend from the front to the rear sides of a panel piece, a requirement defined in both claim 17 and claim 18 (from which claims 20 and 21 depend). Without this teaching, applicant asserts that Frashour et al. cannot be found to obviate the subject matter of these claims and respectfully requests the Examiner to reconsider this rejection.

SUMMARY

In summary, the present application contains claims 1-25, where a number of the claims have been amended to more clearly define the subject matter of the present invention and distinguish its teaching from that of the cited references. Applicant believes that the case, in its present form, is in condition for allowance and respectfully requests an early and favorable response from the Examiner in that regard. If for some reason or other the Examiner does not agree that the case is ready to issue, and that an interview or telephone conversation would further the prosecution, he is requested to contact applicant's attorney at the telephone number listed below.

Respectfully submitted,



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Certification Attached.